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|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|-----|
| ACCCACGCGC | | | AGCGGCCGGA | | | G | ATG Met 1 | CAG Gln | CGG Arg | GGC Gly | GCC Ala 5 | GCG Ala | CTG Leu | TGC Cys | CTG Leu | CGA Arg 10 | 51 |
| CTG | ACC | CCC | CCG | ACC | TTG | AAC | ATC | ACG | GAG | GAG | TCA | CAC | GTC | ATC | GAC | | 99 |
| Leu | Trp | Leu | Cys | Leu 15 | Gly | Leu | Leu | Asp | Gly 20 | Leu | Val | Ser | Asp | Tyr 25 | Ser | | |
| ATG Met | ACC Thr | CCC Pro | CCG Pro 30 | ACC Thr | TTG Leu | AAC Asn | ATC Ile | ACG Thr 35 | GAG Glu | GAG Glu | TCA Ser | CAC His | GTC Val 40 | ATC Ile | GAC Asp | | 147 |
| ACC Thr | GGT Gly | GAC Asp 45 | AGC Ser | CTG Leu | TCC Ser | ATC Ile | TCC Ser 50 | TGC Cys | AGG Arg | GGA Gly | CAG Gln | CAC His 55 | CCC Pro | CTC Leu | GAG Glu | | 195 |
| TGG Trp | GCT Ala 60 | TGG Trp | CCA Pro | GGA Gly | GCT Ala | CAG Gln 65 | GAG Glu | GCG Ala | CCA Pro | GCC Ala | ACC Thr 70 | GGA Gly | GAC Asp | AAG Lys | GAC Asp | | 243 |
| AGC Ser 75 | GAG Glu | GAC Asp | ACG Thr | GGG Gly | GTG Val 80 | GTG Val | CGA Arg | GAC Asp | TGC Cys | GAG Glu 85 | GGC Gly | ACA Thr | GAC Asp | GCC Ala | AGG Arg 90 | | 291 |
| CCC Pro | TAC Tyr | TGC Cys | AAG Lys | GTG Val 95 | TTG Leu | CTG Leu | CTG Leu | CAC His | GAG Glu 100 | GTA Val | CAT His | GCC Ala | AAC Asn | GAC Asp 105 | ACA Thr | | 339 |
| GGC Gly | AGC Ser | TAC Tyr | GTC Val 110 | TGC Cys | TAC Tyr | TAC Tyr | AAG Lys | TAC Tyr 115 | ATC Ile | AAG Lys | GCA Ala | CGC Arg | ATC Ile 120 | GAG Glu | GGC Gly | | 387 |
| ACC Thr | ACG Thr | GCC Ala 125 | GCC Ala | AGC Ser | TCC Ser | TAC Tyr | GTG Val 130 | TTC Phe | GTG Val | AGA Arg | GAC Asp | TTT Phe 135 | GAG Glu | CAG Gln | CCA Pro | | 435 |
| TTC Phe | ATC Ile 140 | AAC Asn | AAG Lys | CCT Pro | GAC Asp | ACG Thr 145 | CTC Leu | TTG Leu | GTC Val | AAC Asn | AGG Arg 150 | AAG Lys | GAC Asp | GCC Ala | ATG Met | | 483 |
| TGG Trp 155 | GTG Val | CCC Pro | TGT Cys | CTG Leu | GTG Val 160 | TCC Ser | ATC Ile | CCC Pro | GGC Gly | CTC Leu 165 | AAT Asn | GTC Val | ACG Thr | CTG Leu | CGC Arg 170 | | 531 |
| TCG Ser | CAA Gln | AGC Ser | TCG Ser | GTG Val 175 | CTG Leu | TGG Trp | CCA Pro | GAC Asp | GGG Gly 180 | CAG Gln | GAG Glu | GTG Val | GTG Val | TGG Trp 185 | GAT Asp | | 579 |
| GAC Asp | CGG Arg | CGG Arg | GGC Gly 190 | ATG Met | CTC Leu | GTG Val | TCC Ser | ACG Thr 195 | CCA Pro | CTG Leu | CTG Leu | CAC His | GAT Asp 200 | GCC Ala | CTG Leu | | 627 |
| TAC Tyr | CTG Leu | CAG Gln 205 | TGC Cys | GAG Glu | ACC Thr | ACC Thr | TGG Trp 210 | GGA Gly | GAC Asp | CAG Gln | GAC Asp | TTC Phe 215 | CTT Leu | TCC Ser | AAC Asn | | 675 |

FIG. 1A

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| | | | | | | | | | | | | | | | | |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------|
| CCC Pro | TTC Phe 220 | CTG Leu | GTG Val | CAC His | ATC Ile | ACA Thr 225 | GGC Gly | AAC Asn | GAG Glu | CTC Leu | TAT Tyr 230 | GAC Asp | ATC Ile | CAG Gln | CTG Leu | 723 |
| TTG Leu 235 | CCC Pro | AGG Arg | AAG Lys | TCG Ser | CTG Leu 240 | GAG Glu | CTG Leu | CTG Leu | GTA Val | GGG Gly 245 | GAG Glu | AAG Lys | CTG Leu | GTC Val | CTC Leu 250 | 771 |
| AAC Asn | TGC Cys | ACC Thr | GTG Val | TGG Trp 255 | GCT Ala | GAG Glu | TTT Phe | AAC Asn | TCA Ser 260 | GGT Gly | GTC Val | ACC Thr | TTT Phe | GAC Asp 265 | TGG Trp | 819 |
| GAC Asp | TAC Tyr | CCA Pro | GGG Gly 270 | AAG Lys | CAG Gln | GCA Ala | GAG Glu | CGG Arg 275 | GGT Gly | AAG Lys | TGG Trp | GTG Val | CCC Pro 280 | GAG Glu | CGA Arg | 867 |
| CGC Arg | TCC Ser | CAA Gln 285 | CAG Gln | ACC Thr | CAC His | ACA Thr | GAA Glu 290 | CTC Leu | TCC Ser | AGC Ser | ATC Ile | CTG Leu 295 | ACC Thr | ATC Ile | CAC His | 915 |
| AAC Asn | GTC Val 300 | AGC Ser | CAG Gln | CAC His | GAC Asp | CTG Leu 305 | GGC Gly | TCG Ser | TAT Tyr | GTG Val | TGC Cys 310 | AAG Lys | GCC Ala | AAC Asn | AAC Asn | 963 |
| GGC Gly 315 | ATC Ile | CAG Gln | CGA Arg | TTT Phe | CGG Arg 320 | GAG Glu | AGC Ser | ACC Thr | GAG Glu | GTC Val 325 | ATT Ile | GTG Val | CAT His | GAA Glu | AAT Asn 330 | 1011 |
| CCC Pro | TTC Phe | ATC Ile | AGC Ser | GTC Val 335 | GAG Glu | TGG Trp | CTC Leu | AAA Lys | GGA Gly 340 | CCC Pro | ATC Ile | CTG Leu | GAG Glu | GCC Ala 345 | ACG Thr | 1059 |
| GCA Ala | GGA Gly | GAC Asp | GAG Glu 350 | CTG Leu | GTG Val | AAG Lys | CTG Leu | CCC Pro 355 | GTG Val | AAG Lys | CTG Leu | GCA Ala | GCG Ala 360 | TAC Tyr | CCC Pro | 1107 |
| CCG Pro | CCC Pro | GAG Glu 365 | TTC Phe | CAG Gln | TGG Trp | TAC Tyr | AAG Lys 370 | GAT Asp | GGA Gly | AAG Lys | GCA Ala | CTG Leu 375 | TCC Ser | GGG Gly | CGC Arg | 1155 |
| CAC His | AGT Ser 380 | CCA Pro | CAT His | GCC Ala | CTG Leu | GTG Val 385 | CTC Leu | AAG Lys | GAG Glu | GTG Val | ACA Thr 390 | GAG Glu | GCC Ala | AGC Ser | ACA Thr | 1203 |
| GGC Gly 395 | ACC Thr | TAC Tyr | ACC Thr | CTC Leu | GCC Ala 400 | CTG Leu | TGG Trp | AAC Asn | TCC Ser | GCT Ala 405 | GCT Ala | GGC Gly | CTG Leu | AGG Arg | CGC Arg 410 | 1251 |
| AAC Asn | ATC Ile | AGC Ser | CTG Leu | GAG Glu 415 | CTG Leu | GTG Val | GTG Val | AAT Asn | GTG Val 420 | CCC Pro | CCC Pro | CAG Gln | ATA Ile | CAT His 425 | GAG Glu | 1299 |
| AAG Lys | GAG Glu | GCC Ala | TCC Ser 430 | TCC Ser | CCC Pro | AGC Ser | ATC Ile | TAC Tyr 435 | TCG Ser | CGT Arg | CAC His | AGC Ser | CGC Arg 440 | CAG Gln | GCC Ala | 1347 |

FIG. 1B

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| | | | | | | | | | | | | | | | | |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------|
| CTC Leu | ACC Thr | TGC Cys 445 | ACG Thr | GCC Ala | TAC Tyr | GGG Gly | GTG Val 450 | CCC Pro | CTG Leu | CCT Pro | CTC Leu | AGC Ser 455 | ATC Ile | CAG Gln | TGG Trp | 1395 |
| CAC His | TGG Trp 460 | CGG Arg | CCC Pro | TGG Trp | ACA Thr | CCC Pro 465 | TGC Cys | AAG Lys | ATG Met | TTT Phe | GCC Ala 470 | CAG Gln | CGT Arg | AGT Ser | CTC Leu | 1443 |
| CGG Arg 475 | CGG Arg | CGG Arg | CAG Gln | CAG Gln | CAA Gln 480 | GAC Asp | CTC Leu | ATG Met | CCA Pro | CAG Gln 485 | TGC Cys | CGT Arg | GAC Asp | TGG Trp | AGG Arg 490 | 1491 |
| GCG Ala | GTG Val | ACC Thr | ACG Thr | CAG Gln 495 | GAT Asp | GCC Ala | GTG Val | AAC Asn | CCC Pro 500 | ATC Ile | GAG Glu | AGC Ser | CTG Leu | GAC Asp 505 | ACC Thr | 1539 |
| TGG Trp | ACC Thr | GAG Glu | TTT Phe 510 | GTG Val | GAG Glu | GGA Gly | AAG Lys | AAT Asn 515 | AAG Lys | ACT Thr | GTG Val | AGC Ser | AAG Lys 520 | CTG Leu | GTG Val | 1587 |
| ATC Ile | CAG Gln | AAT Asn 525 | GCC Ala | AAC Asn | GTG Val | TCT Ser | GCC Ala 530 | ATG Met | TAC Tyr | AAG Lys | TGT Cys | GTG Val 535 | GTC Val | TCC Ser | AAC Asn | 1635 |
| AAG Lys | GTG Lys 540 | GGC Gly | CAG Gln | GAT Asp | GAG Glu | CGG Arg 545 | CTC Leu | ATC Ile | TAC Tyr | TTC Phe | TAT Tyr 550 | GTG Val | ACC Thr | ACC Thr | ATC Ile | 1683 |
| CCC Pro 555 | GAC Asp | GGC Gly | TTC Phe | ACC Thr | ATC Ile 560 | GAA Glu | TCC Ser | AAG Lys | CCA Pro | TCC Ser 565 | GAG Glu | GAG Glu | CTA Leu | CTA Leu | GAG Glu 570 | 1731 |
| GGC Gly | CAG Gln | CCG Pro | GTG Val | CTC Leu 575 | CTG Leu | AGC Ser | TGC Cys | CAA Gln | GCC Ala 580 | GAC Asp | AGC Ser | TAC Tyr | AAG Lys | TAC Tyr 585 | GAG Glu | 1779 |
| CAT His | CTG Leu | CGC Arg | TGG Trp 590 | TAC Tyr | CGC Arg | CTC Leu | AAC Asn | CTG Leu 595 | TCC Ser | ACG Thr | CTG Leu | CAC His | GAT Asp 600 | GCG Ala | CAC His | 1827 |
| GGG Gly | AAC Asn | CCG Pro 605 | CTT Leu | CTG Leu | CTC Leu | GAC Asp | TGC Cys 610 | AAG Lys | AAC Asn | GTG Val | CAT His | CTG Leu 615 | TTC Phe | GCC Ala | ACC Thr | 1875 |
| CCT Pro | CTG Leu 620 | GCC Ala | GCC Ala | AGC Ser | CTG Leu | GAG Glu 625 | GAG Glu | GTG Val | GCA Ala | CCT Pro | GGG Gly 630 | GCG Ala | CGC Arg | CAC His | GCC Ala | 1923 |
| ACG Thr 635 | CTC Leu | AGC Ser | CTG Leu | AGT Ser | ATC Ile 640 | CCC Pro | CGC Arg | GTC Val | GCG Ala | CCC Pro 645 | GAG Glu | CAC His | GAG Glu | GGC Gly | CAC His 650 | 1971 |
| TAT Tyr | GTG Val | TGC Cys | GAA Glu | GTG Val 655 | CAA Gln | GAC Asp | CGG Arg | CGC Arg | AGC Ser 660 | CAT His | GAC Asp | AAG Lys | CAC His | TGC Cys 665 | CAC His | 2019 |

FIG. 1C

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| | | | | | | | | | | | | | | | | |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------|
| AAG Lys | AAG Lys | TAC Tyr | CTG Leu 670 | TCG Ser | GTG Val | CAG Gln | GCC Ala | CTG Leu 675 | GAA Glu | GCC Ala | CCT Pro | CGG Arg | CTC Leu 680 | ACG Thr | CAG Gln | 2067 |
| AAC Asn | TTG Leu | ACC Thr 685 | GAC Asp | CTC Leu | CTG Leu | GTG Val | AAC Asn 690 | GTG Val | AGC Ser | GAC Asp | TCG Ser | CTG Leu 695 | GAG Glu | ATG Met | CAG Gln | 2115 |
| TGC Cys | TTG Leu 700 | GTG Val | GCC Ala | GGA Gly | GCG Ala | CAC His 705 | GCG Ala | CCC Pro | AGC Ser | ATC Ile | GTG Val 710 | TGG Trp | TAC Tyr | AAA Lys | GAC Asp | 2163 |
| GAG Glu 715 | AGG Arg | CTG Leu | CTG Leu | GAG Glu | GAA Glu 720 | AAG Lys | TCT Ser | GGA Gly | GTC Val | GAC Asp 725 | TTG Leu | GCG Ala | GAC Asp | TCC Ser | AAC Asn 730 | 2211 |
| CAG Gln | AAG Lys | CTG Leu | AGC Ser | ATC Ile 735 | CAG Gln | CGC Arg | GTG Val | GCG Arg | GAG Glu 740 | GAG Glu | GAT Asp | GCG Ala | GGA Gly | CCG Pro 745 | TAT Tyr | 2259 |
| CTG Leu | TGC Cys | AGC Ser | GTG Val 750 | TGC Cys | AGA Arg | CCC Pro | AAG Lys | GGC Gly 755 | TGC Cys | GTC Val | AAC Asn | TCC Ser | TCC Ser 760 | GCC Ala | AGC Ser | 2307 |
| GTG Val | GCC Ala | GTG Val 765 | GAA Glu | GGC Gly | TCC Ser | GAG Glu | GAT Asp 770 | AAG Lys | GGC Gly | AGC Ser | ATG Met | GAG Glu 775 | ATC Ile | GTG Val | ATC Ile | 2355 |
| CTT Leu | GTC Val 780 | GGT Gly | ACC Thr | GGC Gly | GTC Val | ATC Ile 785 | GCT Ala | GTC Val | TTC Phe | TTC Phe | TGG Trp 790 | GTC Val | CTC Leu | CTC Leu | CTC Leu | 2403 |
| CTC Leu 795 | ATC Ile | TTC Phe | TGT Cys | AAC Asn | ATG Met 800 | AGG Arg | AGG Arg | CCG Pro | GCC Ala | CAC His 805 | GCA Ala | GAC Asp | ATC Ile | AAG Lys | ACG Thr 810 | 2451 |
| GGC Gly | TAC Tyr | CTG Leu | TCC Ser | ATC Ile 815 | ATC Ile | ATG Met | GAC Asp | CCC Pro | GGG Gly 820 | GAG Glu | GTG Val | CCT Pro | CTG Leu | GAG Glu 825 | GAG Glu | 2499 |
| CAA Gln | TGC Cys | GAA Glu | TAC Tyr 830 | CTG Leu | TCC Ser | TAC Tyr | GAT Asp | GCC Ala 835 | AGC Ser | CAG Gln | TGG Trp | GAA Glu | TTC Phe 840 | CCC Pro | CGA Arg | 2547 |
| GAG Glu | CGG Arg | CTG Leu 845 | CAC His | CTG Leu | GGG Gly | AGA Arg | GTG Val 850 | CTC Leu | GGC Gly | TAC Tyr | GGC Gly 855 | GCC Ala | TTC Phe | GGG Gly | AAG Lys | 2595 |
| GTG Val | GTG Val 860 | GAA Glu | GCC Ala | TCC Ser | GCT Ala | TTC Phe 865 | GGC Gly | ATC Ile | CAC His | AAG Lys | GGC Gly 870 | AGC Ser | AGC Ser | TGT Cys | GAC Asp | 2643 |
| ACC Thr 875 | GTG Val | GCC Ala | GTG Val | AAA Lys | ATG Met 880 | CTG Leu | AAA Lys | GAG Glu | GGC Gly | GCC Ala | ACG Thr | GCC Ala | AGC Ser | GAG Glu | CAG Gln 890 | 2691 |

FIG. 1D

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| | | | | | | | | | | | | | | | | |
|------|------|------|------|------|-----|------|------|------|-----|------|------|------|------|------|------|------|
| CGC | GCG | CTG | ATG | TCG | GAG | CTC | AAG | ATC | CTC | ATT | CAC | ATC | GGC | AAC | CAC | 2739 |
| Arg | Ala | Leu | Met | Ser | Glu | Leu | Lys | Ile | Leu | Ile | His | Ile | Gly | Asn | His | |
| | | | | 895 | | | | | 900 | | | | | 905 | | |
| CTC | AAC | GTG | GTC | AAC | CTC | CTC | GGG | GCG | TGC | ACC | AAG | CCG | CAG | GGC | CCC | 2787 |
| Leu | Asn | Val | Val | Asn | Leu | Leu | Gly | Ala | Cys | Thr | Lys | Pro | Gln | Gly | Pro | |
| | | | 910 | | | | | 915 | | | | | 920 | | | |
| CTC | ATG | GTG | ATC | GTG | GAG | TTC | TGC | AAG | TAC | GGC | AAC | CTC | TCC | AAC | TTC | 2835 |
| Leu | Met | Val | Ile | Val | Glu | Phe | Cys | Lys | Tyr | Gly | Asn | Leu | Ser | Asn | Phe | |
| | | 925 | | | | | 930 | | | | | 935 | | | | |
| CTG | GCG | GCC | AAG | CGG | GAC | GCC | TTC | AGC | CCC | TGC | GCG | GAG | AAG | TCT | CCC | 2883 |
| Leu | Arg | Ala | Lys | Arg | Asp | Ala | Phe | Ser | Pro | Cys | Ala | Glu | Lys | Ser | Pro | |
| | 940 | | | | | 945 | | | | | 950 | | | | | |
| GAG | CAG | CGC | GGA | CGC | TTC | CGC | GCC | ATG | GTG | GAG | CTC | GCC | AGG | CTG | GAT | 2931 |
| Glu | Gln | Arg | Gly | Arg | Phe | Arg | Ala | Met | Val | Glu | Leu | Ala | Arg | Leu | Asp | |
| 955 | | | | | 960 | | | | | 965 | | | | | 970 | |
| CGG | AGG | CGG | CCG | GGG | AGC | AGC | GAC | AGG | GTC | CTC | TTC | GCG | CGG | TTC | TCG | 2979 |
| Arg | Arg | Arg | Pro | Gly | Ser | Ser | Asp | Arg | Val | Leu | Phe | Ala | Arg | Phe | Ser | |
| | | | | 975 | | | | | 980 | | | | | 985 | | |
| AAG | ACC | GAG | GGC | GGA | GCG | AGG | CGG | GCT | TCT | CCA | GAC | CAA | GAA | GCT | GAG | 3027 |
| Lys | Thr | Glu | Gly | Gly | Ala | Arg | Arg | Ala | Ser | Pro | Asp | Gln | Glu | Ala | Glu | |
| | | | 990 | | | | | 995 | | | | | 1000 | | | |
| GAC | CTG | TGG | CTG | AGC | CCG | CTG | ACC | ATG | GAA | GAT | CTT | GTC | TGC | TAC | AGC | 3075 |
| Asp | Leu | Trp | Leu | Ser | Pro | Leu | Thr | Met | Glu | Asp | Leu | Val | Cys | Tyr | Ser | |
| | | 1005 | | | | | 1010 | | | | | 1015 | | | | |
| TTC | CAG | GTG | GCC | AGA | GGG | ATG | GAG | TTC | CTG | GCT | TCC | CGA | AAG | TGC | ATC | 3123 |
| Phe | Gln | Val | Ala | Arg | Gly | Met | Glu | Phe | Leu | Ala | Ser | Arg | Lys | Cys | Ile | |
| | 1020 | | | | | 1025 | | | | | 1030 | | | | | |
| CAC | AGA | GAC | CTG | GCT | GCT | CGG | AAC | ATT | CTG | CTG | TCG | GAA | AGC | GAC | GTG | 3171 |
| His | Arg | Asp | Leu | Ala | Ala | Arg | Asn | Ile | Leu | Leu | Ser | Glu | Ser | Asp | Val | |
| 1035 | | | | 1040 | | | | | | 1045 | | | | | 1050 | |
| GTG | AAG | ATC | TGT | GAC | TTT | GGC | CTT | GCC | CGG | GAC | ATC | TAC | AAA | GAC | CCC | 3219 |
| Val | Lys | Ile | Cys | Asp | Phe | Gly | Leu | Ala | Arg | Asp | Ile | Tyr | Lys | Asp | Pro | |
| | | | | 1055 | | | | 1060 | | | | | | 1065 | | |
| GAC | TAC | GTC | CGC | AAG | GGC | AGT | GCC | CGG | CTG | CCC | CTG | AAG | TGG | ATG | GCC | 3267 |
| Asp | Tyr | Val | Arg | Lys | Gly | Ser | Ala | Arg | Leu | Pro | Leu | Lys | Trp | Met | Ala | |
| | | | 1070 | | | | 1075 | | | | | | 1080 | | | |
| CCT | GAA | AGC | ATC | TTC | GAC | AAG | GTG | TAC | ACC | ACG | CAG | AGT | GAC | GTG | TGG | 3315 |
| Pro | Glu | Ser | Ile | Phe | Asp | Lys | Val | Tyr | Thr | Thr | Gln | Ser | Asp | Val | Trp | |
| | | 1085 | | | | | 1090 | | | | | 1095 | | | | |
| TCC | TTT | GGG | GTG | CTT | CTC | TGG | GAG | ATC | TTC | TCT | CTG | GGG | GCC | TCC | CCG | 3363 |
| Ser | Phe | Gly | Val | Leu | Leu | Trp | Glu | Ile | Phe | Ser | Leu | Gly | Ala | Ser | Pro | |
| | 1100 | | | | | 1105 | | | | | 1110 | | | | | |

FIG. 1E

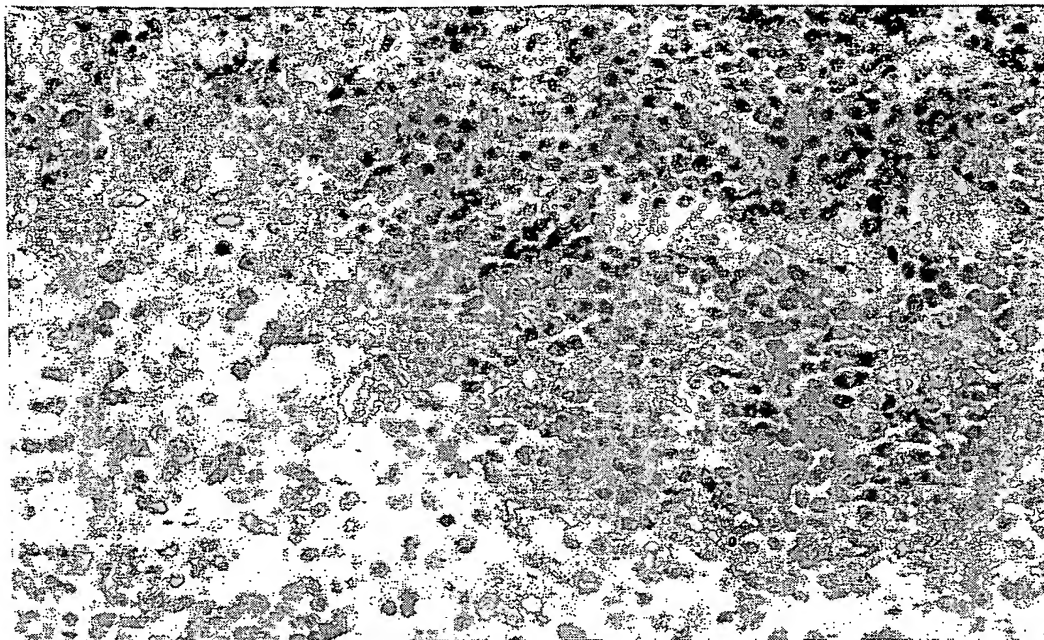
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|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|------------|------------|------------|------------|------------|------|------------|------------|------------|------------|------------|------------|------|------------|------------|------------|------------|------------|------------|------|------------|------------|------------|------------|------------|------------|------|------------|------------|------------|-------------|------------|------------|------|------------|------------|-----------|------------|------------|------------|------|------------|------------|-------|--|--|--|--|--|------|
| TAC Tyr 1115 | CCT Pro | GGG Gly | GTG Val | CAG Gln 1120 | ATC Ile | AAT Asn | GAG Glu | GAG Glu | TTC Phe 1125 | TGC Cys | CAG Gln | CGC Arg | GTG Val | AGA Arg 1130 | GAC Asp | 3411 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GGC Gly | ACA Thr | AGG Arg | ATG Met 1135 | AGG Arg | GCC Ala | CCG Pro | GAG Glu | CTG Leu 1140 | GCC Ala | ACT Thr | CCC Pro | GCC Ala | ATA Ile 1145 | CGC Arg | CAC His | 3459 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ATC Ile | ATG Met | CTG Leu 1150 | AAC Asn | TGC Cys | TGG Trp | TCC Ser | GGA Gly | GAC Asp 1155 | CCC Pro | AAG Lys | GCG Ala | AGA Arg 1160 | CCT Pro | GCA Ala | TTC Phe | 3507 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TGC Ser | GAC Asp 1165 | CTG Leu | GTG Val | GAG Glu | ATC Ile | CTG Leu 1170 | GGG Gly | GAC Asp | CTG Leu | CTC Leu | CAG Gln 1175 | GGC Gly | AGG Arg | GGC Gly | CTG Leu | 3555 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CAA Gln 1180 | GAG Glu | GAA Glu | GAG Glu | GAG Glu | GTC Val 1185 | TGC Cys | ATG Met | GCC Ala | CCG Pro | CGC Arg 1190 | AGC Ser | TCT Ser | CAG Gln | AGA Ser | TCA Ser | 3603 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GAA Glu 1195 | GAG Glu | GGC Gly | AGC Ser | TTC Phe 1200 | TCG Ser | CAG Gln | GTG Val | TCC Ser | ACC Thr 1205 | ATG Met | GCC Ala | CTA Leu | CAC His | ATC Ile 1210 | GCC Ala | 3651 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CAG Gln | GCT Ala | GAC Asp | GCT Ala 1215 | GAG Glu | GAC Asp | AGC Ser | CCG Pro | CCA Pro 1220 | AGC Ser | CTG Leu | CAG Gln | CGC Arg | CAC His 1225 | AGC Ser | CTG Leu | 3699 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GCC Ala | GCC Ala | AGG Arg 1230 | TAT Tyr | TAC Tyr | AAC Asn | TGG Trp | GTG Val 1235 | TCC Ser | TTT Phe | CCC Pro | GGG Gly | TGC Cys 1240 | CTG Leu | GCC Ala | AGA Arg | 3747 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GGG Gly | GCT Ala 1245 | GAG Glu | ACC Thr | CGT Arg | GGT Gly | TCC Ser 1250 | TCC Ser | AGG Arg | ATG Met | AAG Lys | ACA Thr 1255 | TTT Phe | GAG Glu | GAA Glu | TTC Phe | 3795 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCC Phe 1260 | ATG Met | ACC Thr | CCA Pro | ACG Thr | ACC Thr 1265 | TAC Tyr | AAA Lys | GGC Gly | TCT Ser | GTG Val 1270 | GAC Asp | AAC Asn | CAG Gln | ACA Thr | GAC Asp | 3843 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AGT Ser 1275 | GGG Gly | ATG Met | GTG Val | CTG Leu 1280 | GCC Ala | TCG Ser | GAG Glu | GAG Glu | TTT Phe 1285 | GAG Glu | CAG Gln | ATA Ile | GAG Glu | AGC Ser 1290 | AGG Arg | 3891 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CAT His | AGA Arg | CAA Gln | GAA Glu 1295 | AGC Ser | GGC Gly | TTC Phe | AGG Arg | TAGCTGAAGC AGAGAGAGAG AAGGCAGCAT | | | | | | | | 3945 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ACGTCAGCAT | TTTCTTCTCT | GCACCTTATAA | GAAAGATCAA | AGACTTTAAG | ACTTTTCGCTA | 4005 | TTTCTTCTAC | TGCTATCTAC | TACAAACTTC | AAAGAGGAAC | CAGGAGGACA | AGAGGAGCAT | 4065 | GAAAGTGGAC | AAGGAGTGTG | ACCACTGAAG | CACCACAGGG | AGGGGTTAGG | CCTCCGGATG | 4125 | ACTGCGGGCA | GGCCTGGATA | ATATCCAGCC | TCCCACAAGA | AGCTGGTGGG | GCAGAGTGTT | 4185 | CCCTGACTCC | TCCAAGGAAA | GGGAGACGCC | CTTTCATGGT | CTGCTGAGTA | ACAGGTGCCT | 4245 | TCCCAGACAC | TGCGTTTACT | GCTTGACCAA | AGAGCCCTCA | AGCGGCCCTT | ATGCCAGCGT | 4305 | GACAGAGGGC | TCACCTCTTG | CCTTCTAGGT | CACCTTCTCAC | AATGTCCCTT | CAGCACCTGA | 4365 | CCCTGTGCCC | GCCGATTATT | CCTTGTAAT | ATGAGTAATA | CATCAAAGAG | TAGTATTAAA | 4425 | AGCTAATTAA | TCATGTTTAT | AAAAA | | | | | | 4450 |

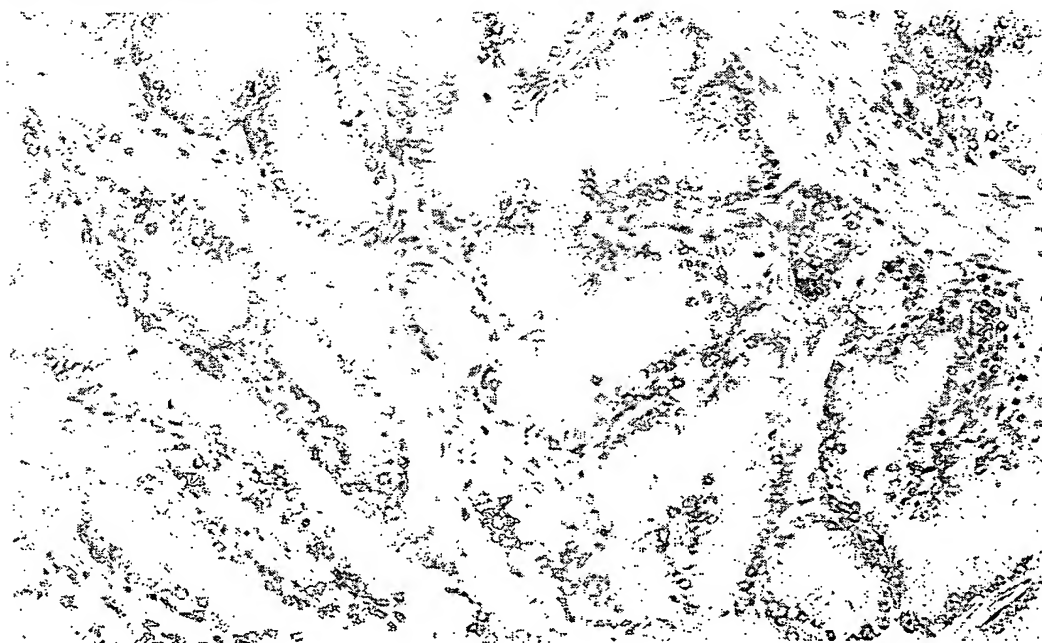
FIG. 1F

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Benign Node stained with anti-FLT-4 antibody:

**FIG.2A**

BPH stained with anti-FLT-4:

**FIG.2B**

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Node with prostatic metastases stained with anti-FLT-4 antibody:

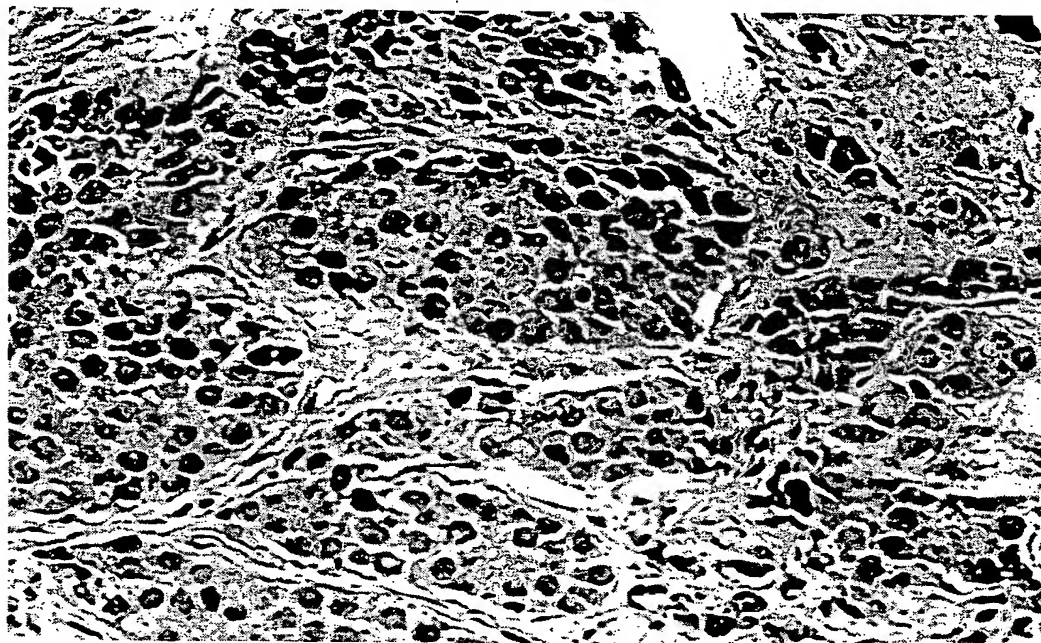


FIG.2C

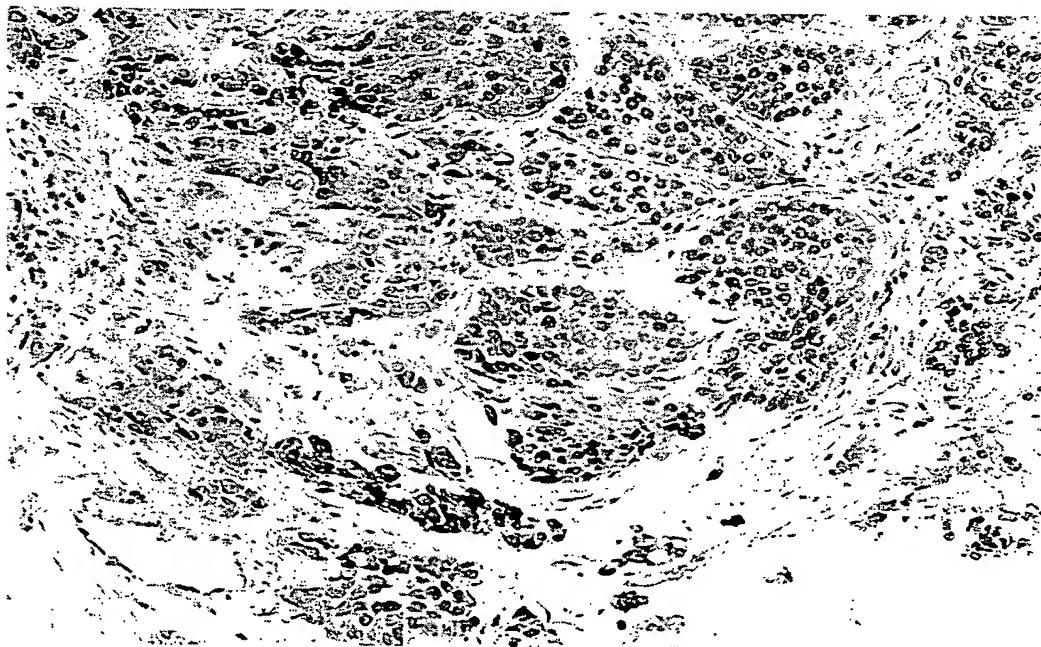


FIG.2D

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BPH and extensive CoP stained with anti-FLT-4 showing positive reactivity in CoP and mostly negative reactivity in BPH:

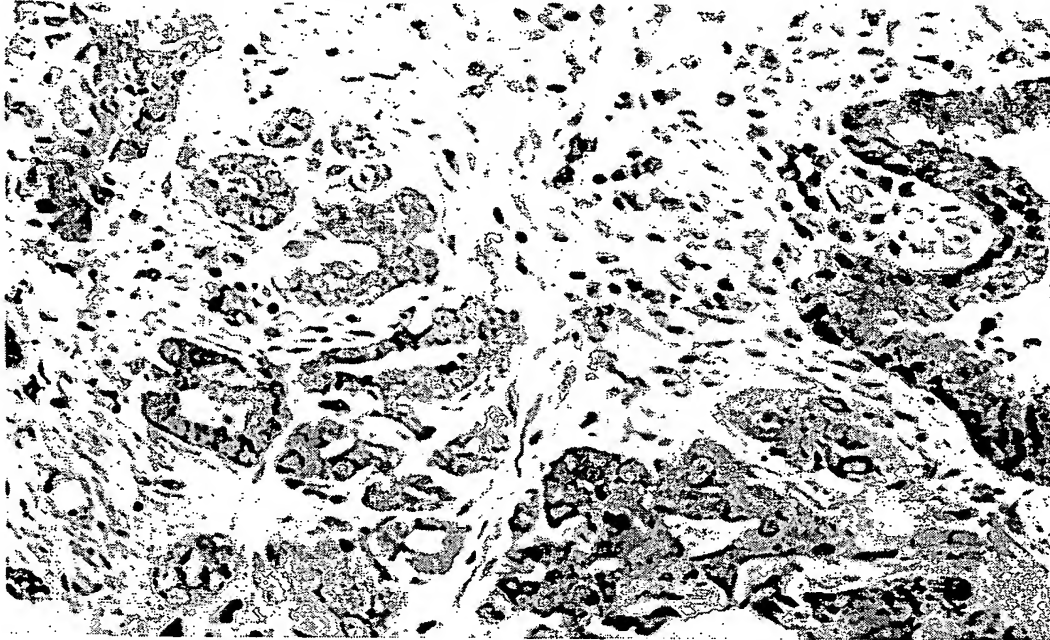


FIG.2E

Extensive CoP stained with anti-FLT-4:

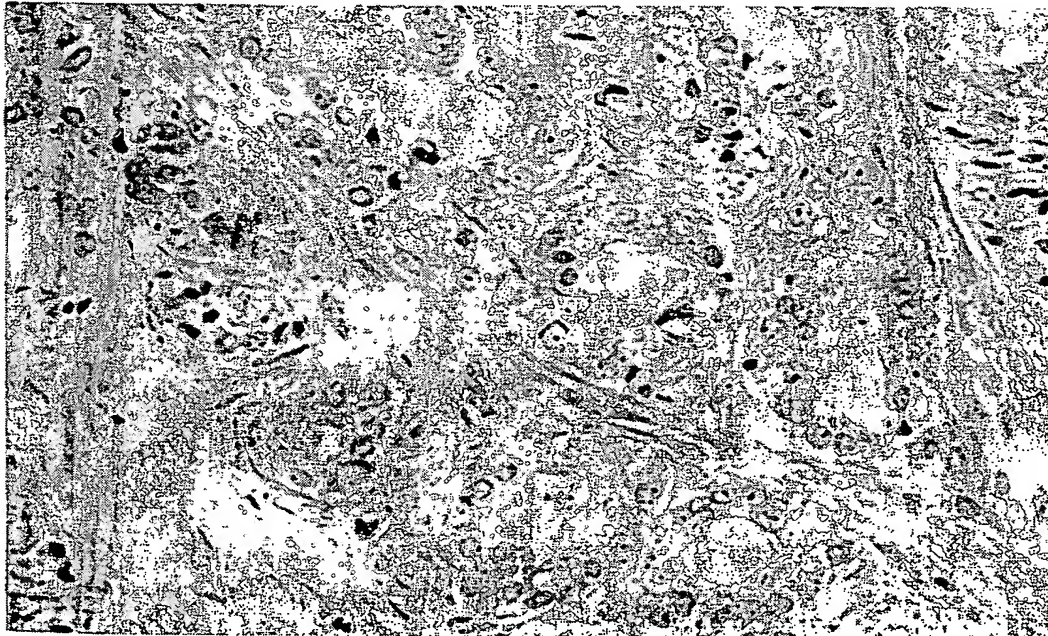


FIG.2F

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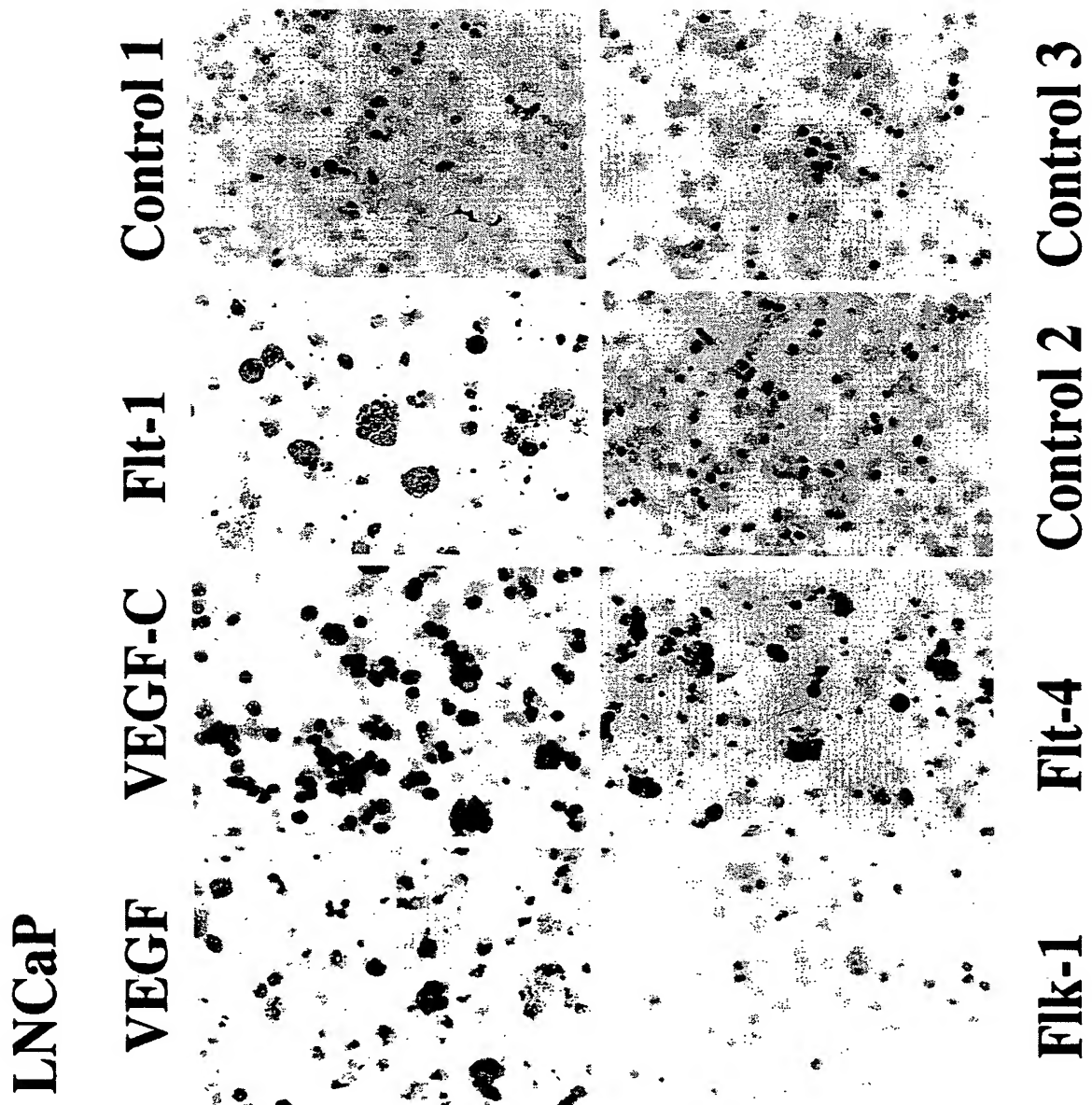


FIG.3A

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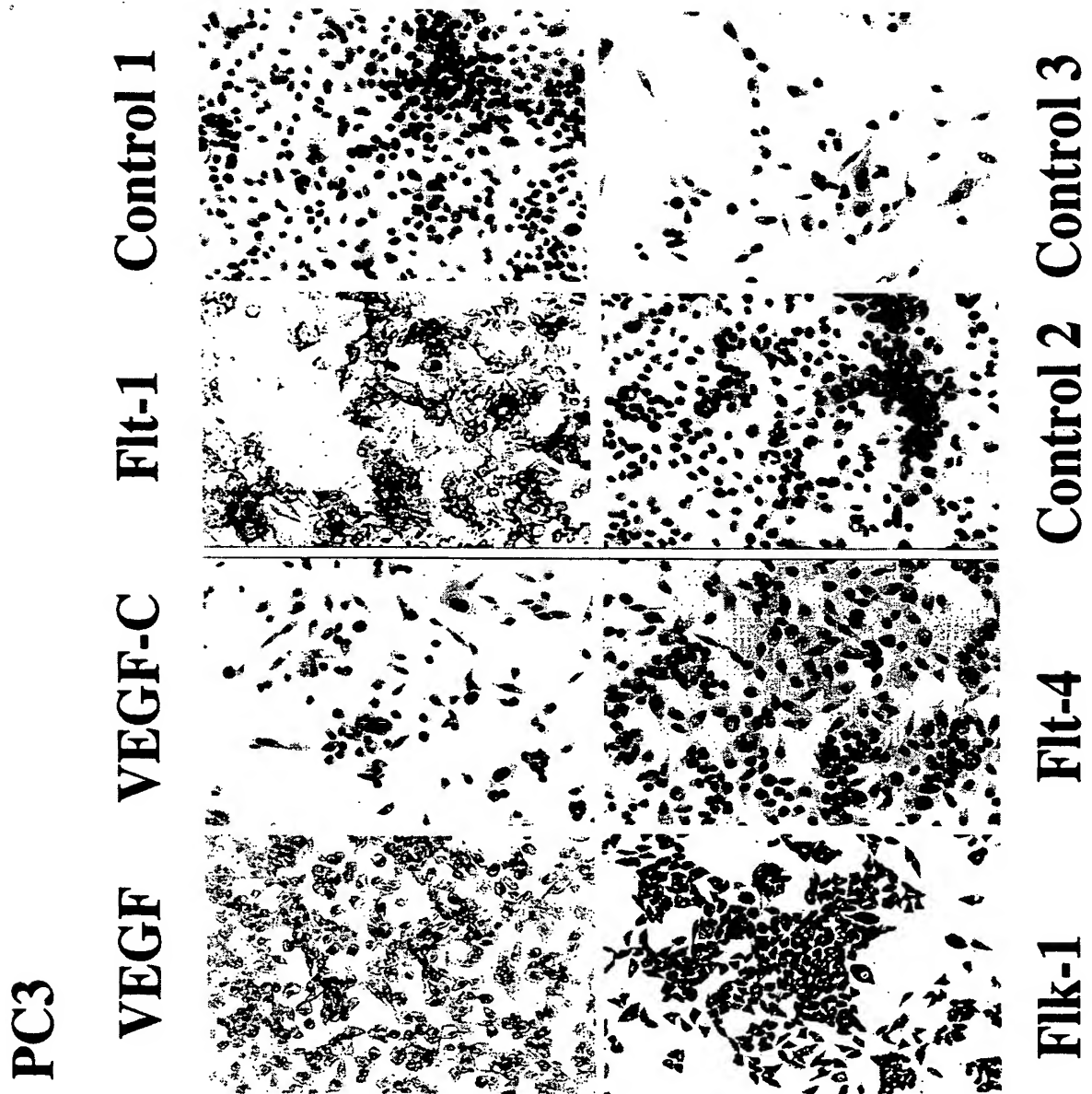


FIG.3B

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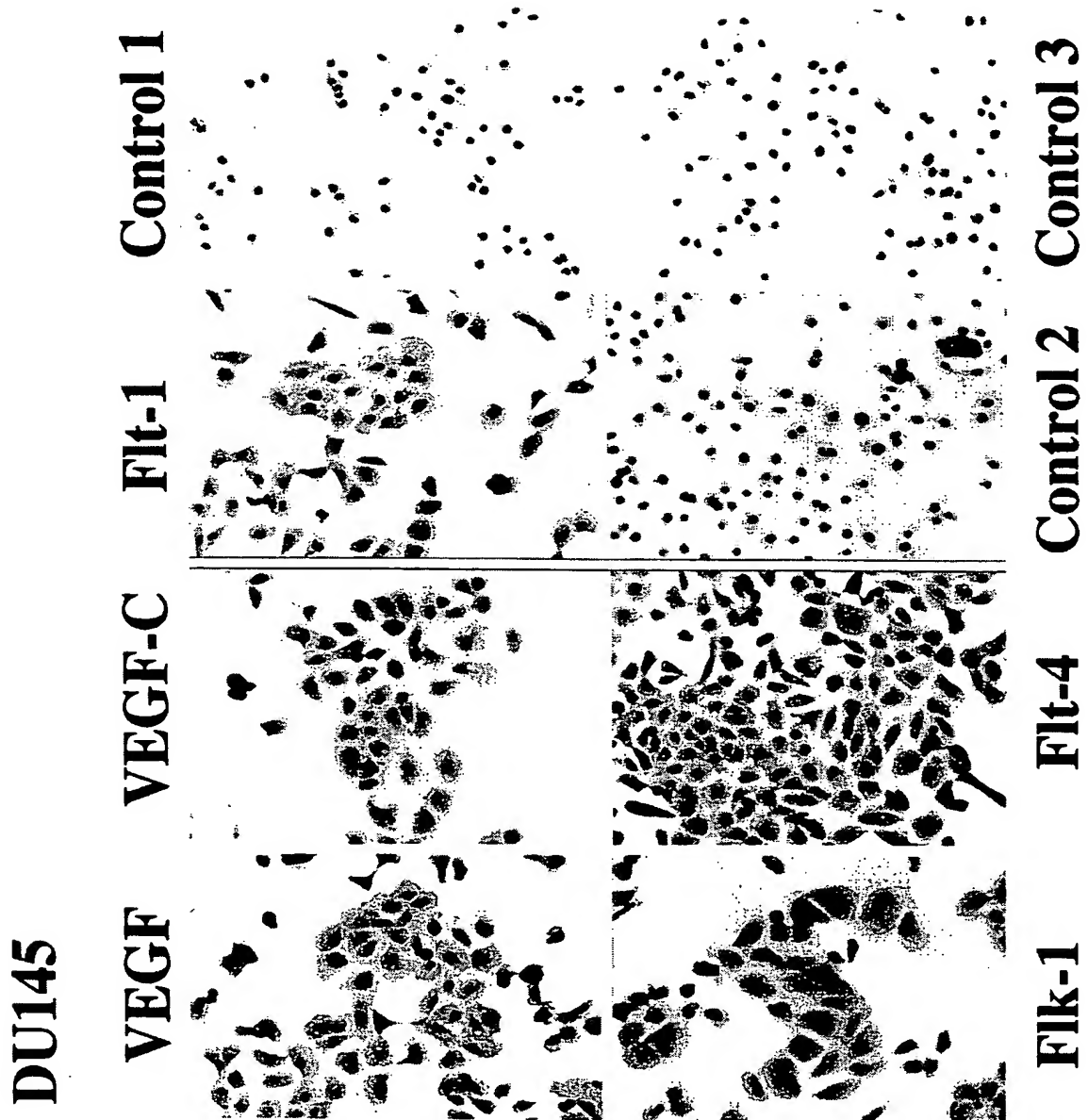


FIG.3C

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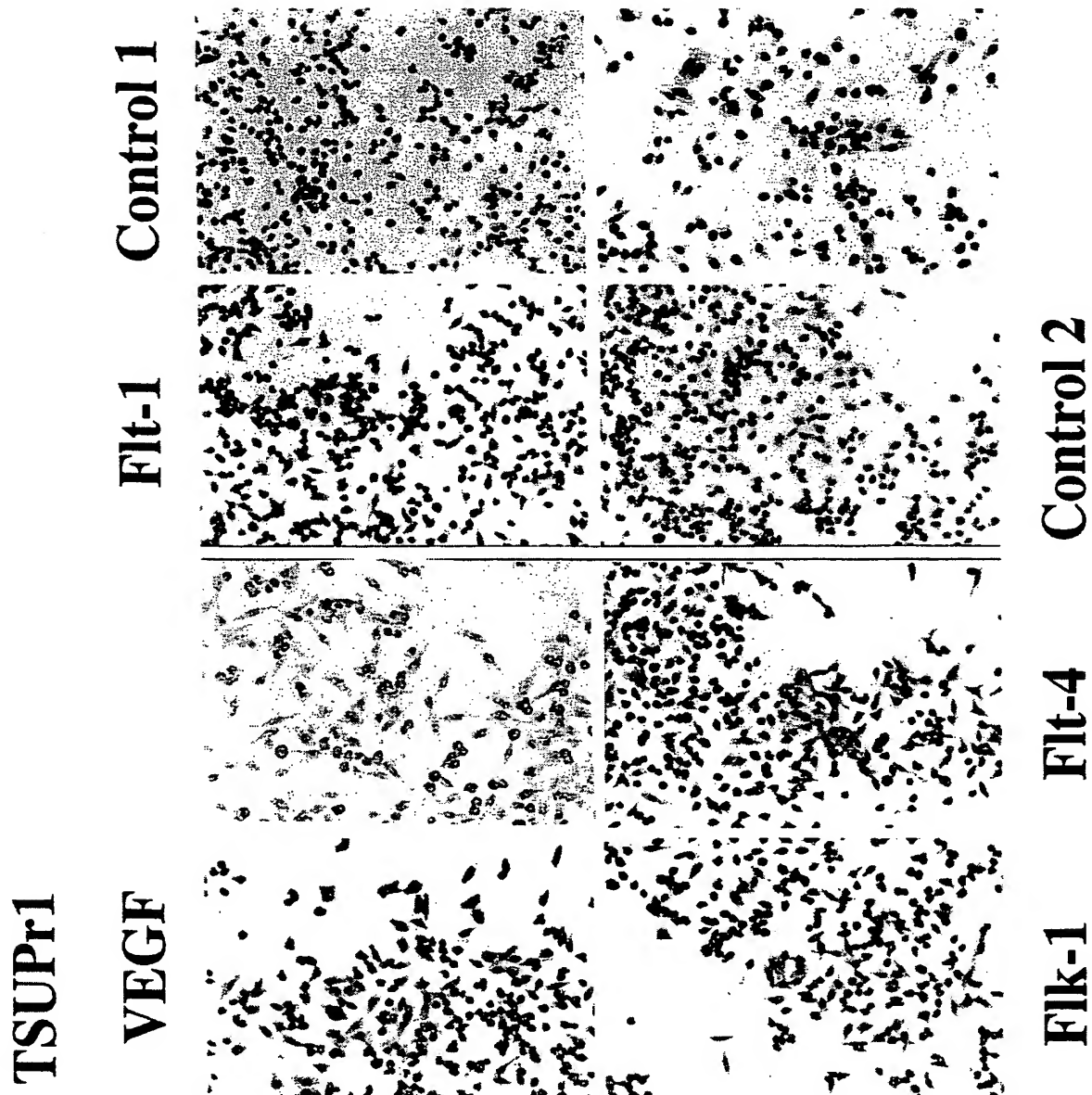


FIG. 3D

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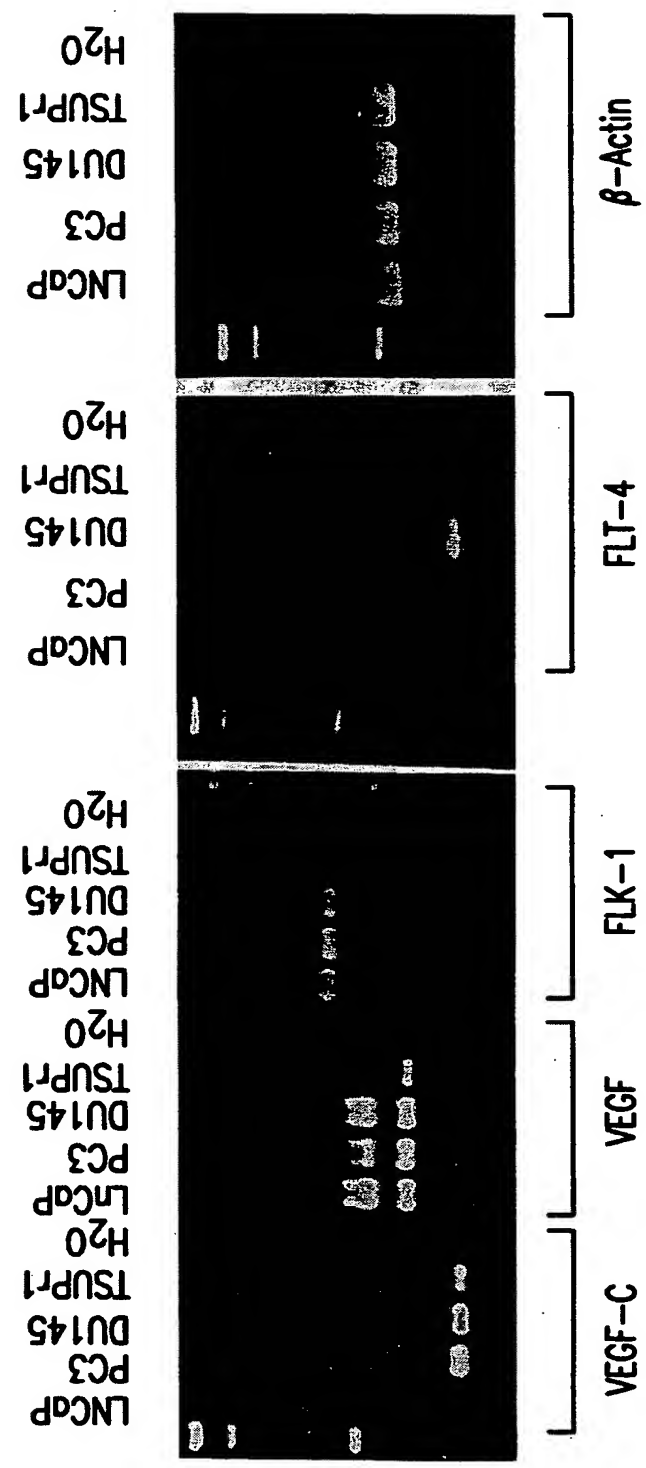
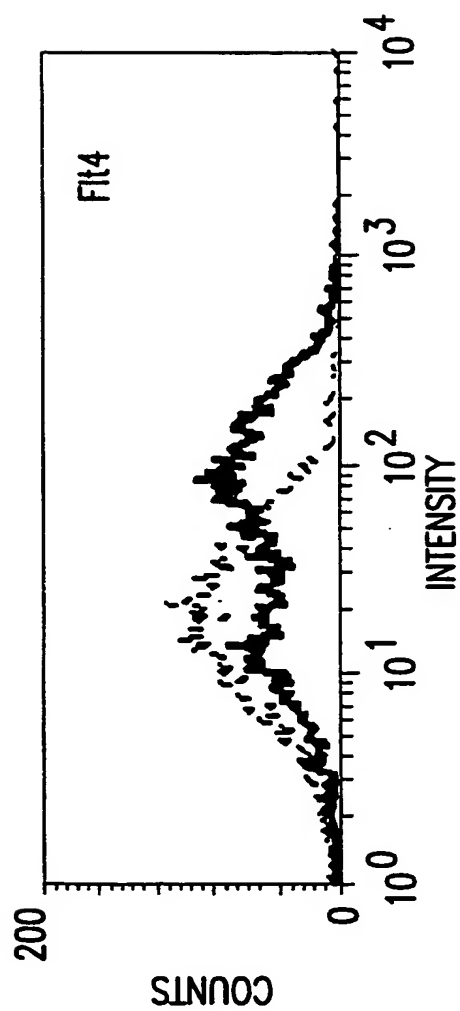


FIG.4

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The dotted line shows the isotype control while the solid line shows binding with specific antibodies.

FIG.5

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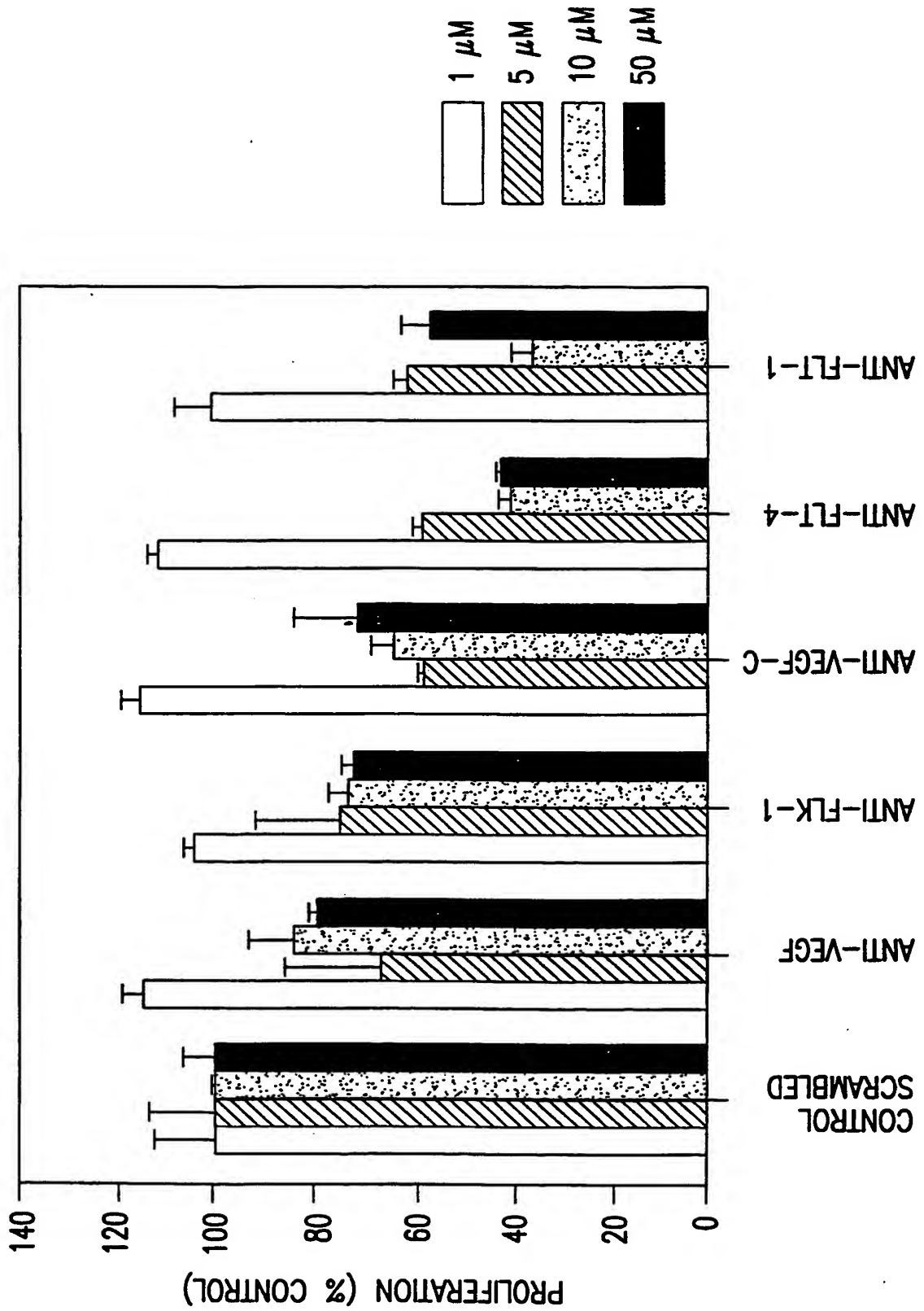


FIG. 6

ANTISENSE OLIGONUCLEOTIDE